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STEALTH AND DECEPTION – SPEED AND VIOLENCE:

How the New Threat Affects Physical Protection Systems

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This briefing is:

UNCLASSIFIED

Thesis

- High-risk facilities should re-evaluate their Physical Protection Systems (PPS) based on terrorists' current Method of Operation.

Current Method of Operation (MO)

- Stealth and Deception
  - Position Terrorists and Assets for attack
  - At Detection, or time of the their choosing, strategy shifts
- Speed and Violence
  - Multiple, synchronized Improvised Explosive Devices (IEDs)
  - Detonated at self-lethal range

Old Physical Protection Systems

- Designed prior to realistic terrorist threat on American soil
- Focused on deterrence of vandalism, theft

New Physical Protection System

- Developed by Sandia National Laboratories
- Well-established methodology used to protect nuclear assets
- Concepts are not “new”, but application to non-nuclear, high-risk facilities is a current trend

Assumptions Challenged

- Application of Sandia model must consider new threat
- By using Stealth and Deception, Detection/Assessment may not occur at the perimeter
- By using Speed and Violence in a suicidal manner, time available to defeat an attack is significantly reduced

PPS Functions Review

- Detection (useless without assessment)
  - Perimeter and entry control most common
- Delay (multiple, serial barriers)
  - provide time for response force to arrive and interrupt the adversary
- Response – clear communication essential
  - Must have capability to interrupt adversary prior to mission accomplishment

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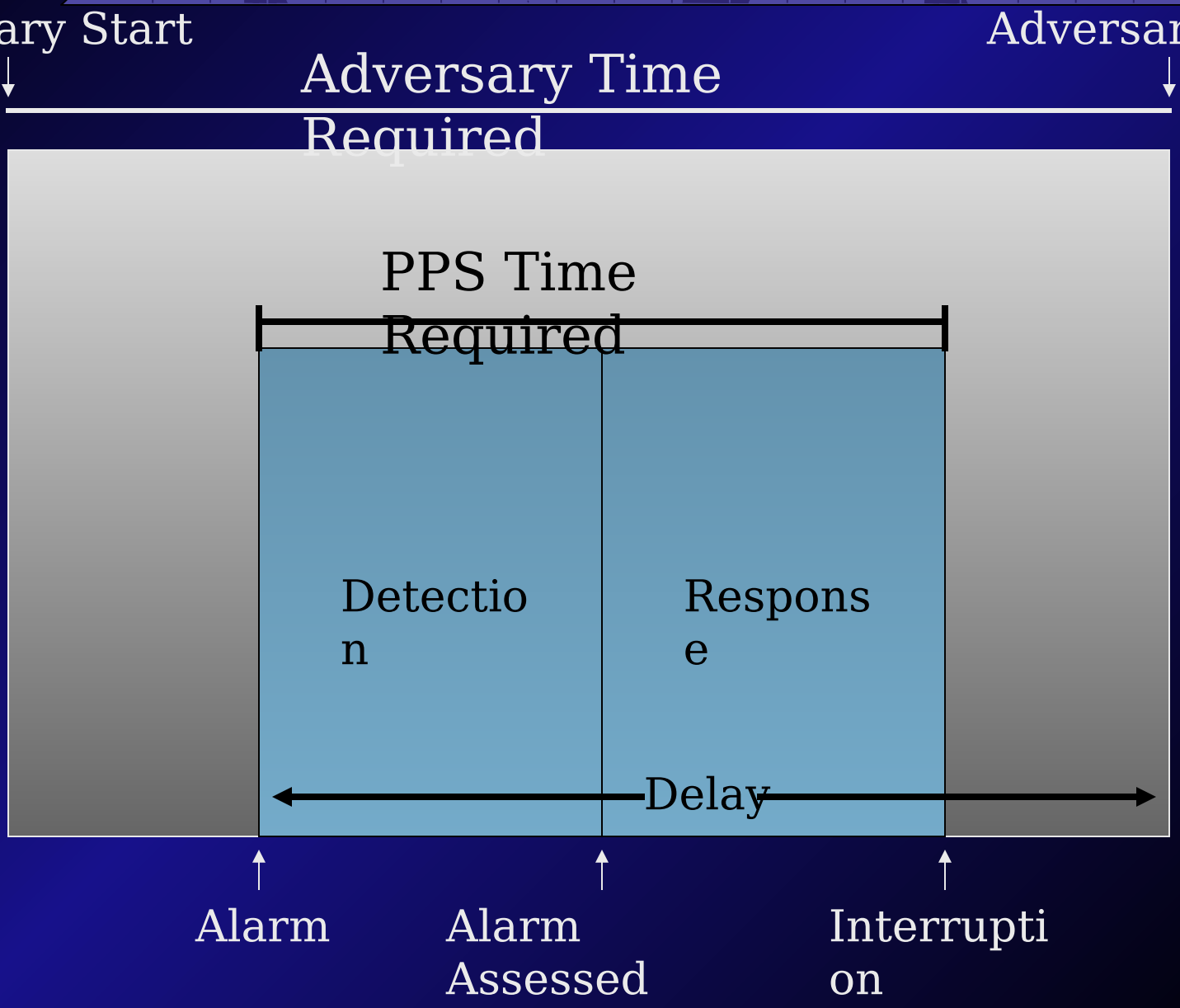

Graph

PPS Characteristics Review

- Balanced Protection
  - Equal time and difficulty along all possible paths
- Protection –In – Depth
  - multiple obstacles that must be defeated in sequence
- Redundancy
  - mitigates the danger of individual component degradation

Design Basis Threat (DBT)

- The DBT is the worst potential adversary or scenario that a facility's PPS is created to defeat
- Nuclear facilities have used the following DBT
  - The DBT is considered to include an attack using stealth and deception initially, then a determined, violent assault by several persons who may be well trained, have inside assistance, weapons, tools, vehicles, and the ability to operate as two or more teams

"Containment" vs. "Denial"

- Suicidal terrorists do not need to escape to succeed
- This reduces the time available to intervene
- "Containment" strategy previously used
  - Adversary could "get-in", but response force would arrive before they could "get-out"
- "Denial" strategy more appropriate
  - Terrorists must be interrupted prior to reaching critical node.

Even Less Time Available

- Using Stealth and Deception, detection may not occur at the perimeter
- Adversary time spent before detection does not “count”.
- Highlights the importance of Delay and Response
- U.S.S. Cole attack

"Swipe-card" Example

- Expands a secure perimeter to each cardholder's purse, vehicle, or home.
- To defeat a secure perimeter at a hardened facility, terrorist need only break in to an employee's car
- He may enter undetected, and have a considerable "head-start" on the response force once he is detected

Critical Detection Point (CDP)

- The CDP is any position on a facility where if an adversary is detected, there is enough time remaining for the response force to interrupt the adversary

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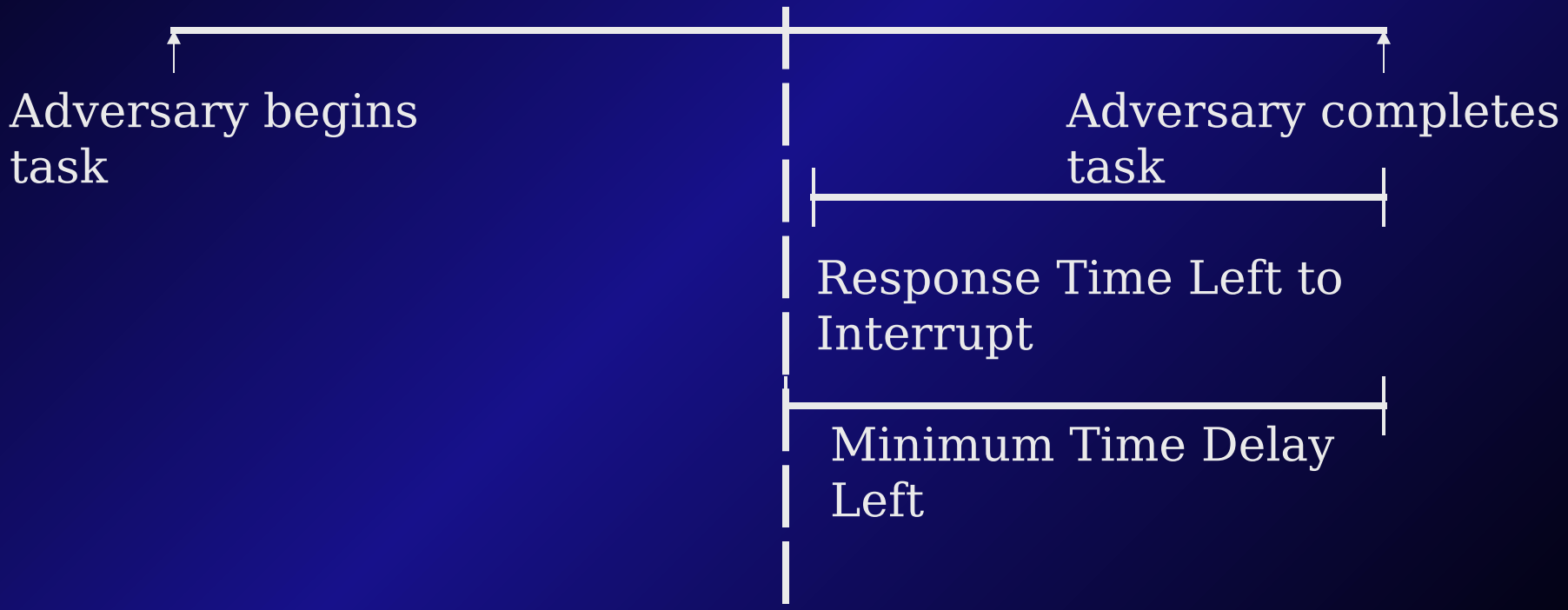
Adversary Minimizes Detection

SPEED AND VIOLENCE

Adversary Minimizes Delay



Critical Detection Point:

Minimum delay along terrorists' path just exceeds the response force's time to interrupt

Graph

CDP Failings

- Many facilities do not know where their CDP is
- If they do know, they assume that detection will occur at the perimeter
- Many perimeters are built on property lines, without regard to their CDP.
- In many cases, the CDP might already be OUTSIDE of the perimeter

Speed and Violence

- Adversary may completely disregard stealth and still accomplish his mission.
- Beyond the Critical Detection Point at the beginning of the attack
- Demonstrated just last month in Riyadh, Saudi Arabia.
  - Terrorists shot armed guards, and took less than one minute to detonate three IEDs at Western housing complexes

Response Force Limitations

- Response force may not be adequate, or have adequate information to stop violent adversaries
- Columbine example
  - Officers on scene in minutes.
  - Took over one hour AFTER adversaries' suicides for officers to enter building
  - First responders cautious due to unknown threat

Response Force Limitations (cont)

- Response force caution can be expected
  - So many first responders died on September 11th when the World Trade Center Towers collapsed
  - Potential threat of Nuclear, Biological, or Chemical (NBC) contaminants in a future terrorist attack
- Undue caution minimized with clear, concise, and consistent communications
- Practice the communication and security plan with the response force and local law enforcement

Conclusions

- "Bombings are responsible for approximately 70 percent of the historical occurrences of terrorist activity."
- Deterrence is no longer sufficient
  - The absence of an attack does not validate a facility's current Physical Protection System
- High-Risk facilities must seek expertise on PPS design

Conclusions (continued)

- Delay is too often neglected
- CDP must be determined
- Practice drills with law enforcement and medical responders and simulated “terrorists” must be conducted and evaluated regularly
- Follow through with lessons learned. Facilities must adjust their CDP and PPS accordingly

Summary

- Terrorists are not afraid of dying, they are afraid of failing
- They will develop plans that have the greatest impact and probability of success
- By employing tactics of Stealth and Deception, detection may not occur at the perimeter.

Summary (continued)

- By employing tactics of Speed and Violence, security may be evacuating instead of responding
- High-risk facilities must re-evaluate their Physical Protection Systems in light of sound PPS design criteria, current intelligence, and adversary methods.

Questions?